

# Module specification

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Module code	ENG797
Module title	Human Centred Design
Level	7
Credit value	40
Faculty	FAST
HECoS Code	100048
Cost Code	GAME

# Programmes in which module to be offered

Programme title	Is the module core or option for this programme
MSc Innovative Design MSc Innovative Design with Advanced Practice	Core

## **Pre-requisites**

None

## Breakdown of module hours

Learning and teaching hours	30 hrs
Placement tutor support	0 hrs
Supervised learning e.g., practical classes, workshops	0 hrs
Project supervision (level 6 projects and dissertation modules only)	0 hrs
Total active learning and teaching hours	<b>30</b> hrs
Placement / work-based learning	0 hrs
Guided independent study	170 hrs
Module duration (total hours)	200 hrs

For office use only	
Initial approval date	22 <sup>nd</sup> Aug 2022
With effect from date	Sept 2022
Date and details of	
revision	
Version number	1



### **Module aims**

- Understand and practice the key elements of the human-centred design
- Apply the human factors in design and design principles
- Practically consider design elements in a project
- Understand interaction design and its impact on user experience
- Explore social design and its role in the community
- Explore low and high-fidelity prototypes
- Introduce design testing and evaluation

### Module Learning Outcomes - at the end of this module, students will be able to:

1	Demonstrate and critically evaluate the human-centred design and apply human factors and design principles
2	Develop and analyse concepts of design interaction through testing and evaluation tools
3	Analyse the role of social design in community

### Assessment

Indicative Assessment Tasks:

This section outlines the type of assessment task the student will be expected to complete as part of the module. More details will be made available in the relevant academic year module handbook.

**Assessment One** An individually prepared portfolio consisting of a range of assessments such as case studies, laboratory work and Moodle Quiz, introducing the topic areas of each learning outcomes. Guidance material will be provided, which the students will use to generate a Portfolio of work. Assessment one is an individual prepared portfolio and represents 100% of the overall module mark.

Assessment number	Learning Outcomes to be met	Type of assessment	Weighting (%)
1	1-3	Portfolio	100%

### Derogations

None



# Learning and Teaching Strategies

A series of workshop style lectures with student-led seminars and small group activities. Directed learning using library and internet resources will be facilitated using Moodle and MS Teams. This module will also follow the ALF (Active Learning Framework) guidelines, which will include alternative methods of assessment and a blended approach to delivery, with some theory and software sessions being delivered online (depending on requirements and student experience).

# Indicative Syllabus Outline

This module will be delivered over twelve weeks with weekly taught sessions and group practice to introduce the students to design, a tool to achieve strategic innovation, and creative problem-solving. The syllabus outline will include:

- The human centred design paradigm
- Identify user needs and context of use
- Business value proposition
- Understanding user ergonomics
- Usability, affordability, feedback, and error prevention
- Elements of interaction design
- Information architecture and layout design
- Mental models and user interface patterns
- Design for good: social design
- Low and high-fidelity prototyping
- Testing and evaluation

### Indicative Bibliography:

### **Essential Reads**

Y. Rogers, et. al., *Interaction design: beyond human-computer interaction*. 3<sup>rd</sup> ed. Chichester: Wiley, 2011.

### Other indicative reading

F. Loizides, et al., *Human Computer Interaction and Emerging Technologies.* Cardiff University Press, 2020.

G. A. Boy, *The handbook of human-machine interaction: A human-centered design approach.* Surrey: Ashga*te,* 2011.

V. J. Papanek, *Design for the real world: human ecology and social change.* 2<sup>nd</sup> ed. London: Thames and Hudson, 1985.

Design Kit, IDEO, The Field Guide to Human Centered Design. New York: IDEO, 2016.

E. Manzini, *Design, when everybody designs: an introduction to design for social innovation.* Cambridge, MA: The MIT Press, 2015.



S. Krug, *Don't make me think: a common sense approach to Web usability*. 2<sup>nd</sup> ed. Berkeley, Calif: New Riders Pub, 2006.

T. Tullis, et. al., *Measuring the user experience collecting, analyzing, and presenting usability metrics.* 2<sup>nd</sup> ed. Amsterdam: Elsevier, 2013.

K. Goodwin, *Designing for the digital age: how to create human-centered products and services.* Indianapolis, IN: Wiley Pub, 2009.

Plus, various others to be signposted on Moodle.

## Employability skills – the Glyndŵr Graduate

Each module and programme is designed to cover core Glyndŵr Graduate Attributes with the aim that each Graduate will leave Glyndŵr having achieved key employability skills as part of their study. The following attributes will be covered within this module either through the content or as part of the assessment. The programme is designed to cover all attributes and each module may cover different areas.

### **Core Attributes**

Engaged Enterprising Creative Ethical

#### **Key Attitudes**

Commitment Curiosity Resilience Confidence Adaptability

### **Practical Skillsets**

Digital Fluency Organisation Critical Thinking Emotional Intelligence Communication